



IN THE SPECIFICATION:

Please amend the Specification as follows.

Please replace paragraph 24 on page 5 with the following paragraph.

A particular embodiment of fuel cell assembly 10 is described with reference to Figures 3 and 4. For this embodiment, control system 92 is configured to adjust the oxidant flow from inlet 90 to direct flow channel ~~440~~ 230 and bypass flow channel ~~230~~ 110, in response to a feedback signal. For example, control system 92 apportions the oxidant flow from inlet 90 to bypass and direct channels 110, 230 based on factors such as the thermal load distribution across fuel cell assembly 10 at a given time. Beneficially, controlling the oxidant flow to bypass and direct channels 110, 230 enhances thermal management, including maintenance of a predetermined thermal gradient across fuel cell stack 220, thereby enhancing the performance of fuel cell stack 220.

Please replace paragraph 31 on page 9 with the following paragraph.

Another fuel cell assembly 10 embodiment is illustrated in Figure 12. The fuel cell assembly 10 of Figure 12 is similar to that described above with respect to Figure 3. For the embodiment shown in Figure 12, control system 92 includes at least one flow regulator 251, 252, 253 positioned upstream of the fuel cell stack 220, for example at outlet 100 of the fuel cell assembly 10, as shown for flow regulator 251. Other exemplary upstream positions for flow regulator 252, 253 include being positioned in bypass flow channel 110, as indicated in Figure 12. According to a more particular embodiment, the flow regulators 252, 253 form a single axisymmetric flow regulator, which is indicated by the two reference numbers 252 and 253 to indicate that it is axisymmetric in nature. In other embodiments, the flow regulators indicated by reference numerals 252, 253 comprise a number of individual flow regulators located at different positions. Control system 92 further includes flow controller 200 and at least one control sensor ~~254~~ 211, 254, which is configured to supply the feedback signal to flow controller 200. Exemplary control sensors 211, 254 are indicated in Figure 12 and are positioned at exemplary control points within the thermal control volume of the fuel assembly 10. Control sensors 211, 254 are configured to measure a parameter, such as temperature, pressure, voltage, electrical current, or heat flux. For example, one exemplary control sensor at a control point 211 is a temperature sensor. The parameter values, for example temperature values,

are supplied to flow controller 200 to generate a feedback signal output. Flow controller 200 directs flow regulators 251, 252, 253 to apportion the oxidant flowing through direct flow channel 230 and the bypass flow channel 110, depending on the feedback signal output. By repeatedly monitoring the thermal environment of fuel cell stack 220 and adjusting the oxidant flow through bypass and direct flow channels 110, 230 in response, control system 92 improves the thermal management of fuel cell assembly 10, by compensating for fluctuations of the thermal load of fuel cell stack 220. In this manner, the exemplary control system 92 helps maintain the operating temperature of the fuel cell assembly 10 within prescribed limits or ranges.